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TRAORE, FATOUMATA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/721,753

Applicant(s)

SHIM ET AL.

Examiner

FATOUMATA TRAORE

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May, 19 2008 has been entered. Claims 1, 9, 12, 16, have been amended. Claims 1-22 are pending and have been considered below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the limitation of "*sending the access key and the identification information to the proxy server*". It is unclear to the examiner, if the identification information is the received proxy server identification or different identification information. For examination purpose only, the examiner will interpret the claim as "*sending the access key and a first control identification information to the proxy server*". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 6, 16 and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Grantges, Jr. et al (US 6,510,464).

Claim 1: Grantges, Jr. et al discloses a method for controlling a network remotely, comprising:

- i. Configuring a first control unit inside a first firewall to control the network (Firewall system 32 is configured to examine all messages destined for, or exiting from, the private, secure network, and to block those that do not meet predetermined security criteria) (column 5, lines 40-57);
- ii. Configuring a proxy server outside the first firewall (Proxy server 34 is disposed on the insecure public network side of firewall system 32, in a so-called Demilitarized Zone (DMZ). A DMZ is located between the insecure) (column 5, lines 58-67); and
- iii. Establishing a session between the first control unit and the proxy server (gateway 38 includes gateway proxy server 40 and gateway web

server 44. Gateway proxy server 40 is configured to establish second secure connection 54 across firewall system 32 with DMZ proxy server 34) (column 6, lines 37-67), wherein establishing the session is executed using an access key (further messages between client computer 22 and DMZ proxy server 34 are encrypted in accordance with a session key known to both client computer 22 and DMZ proxy 34) (column 8, lines 40-55).

.Claim 6: Grantges, Jr. et al discloses a communications method as in claim 1 above, and Grantges, Jr. et al further discloses wherein configuring the proxy server includes:

- i. Receiving the first control unit identification information (*column 6, lines 3-13*);
- ii. Storing the first control unit identification information in the proxy server (*column 6, lines 10-35*);
- iii. Adding the first control unit as a first remote device (*column 6, lines 3-30*); and
- iv. Exchanging a validation message between the first control unit and the proxy server (*column 6, lines 3-30*).

Claims 16 and 21: Grantges, Jr. et al discloses a system and a method communications system, comprising:

- i. A first console residing within an unprotected public network and configured to generate at least one console request message(*column 10,*

lines 32-55), the console request message including at least one of a request for network management data, a request for Internet Protocol (IP)-Private Branch Exchange (PBX), or a request for status information(*column 10, lines 45-57*);

- ii. A proxy server coupled to the first console(*FIG. 1*), the proxy server configured to pool the at least one request, and to provide access from at least one console to the first control unit, the proxy server being implemented within a De-Militarized Zone (DMZ) between a protected network and the unprotected public network (*column 4, lines 1-25; Fig. 1*) ;
- iii. A first firewall coupled to the proxy server (*Fig. 1*); and
- iv. A first control unit residing within the protected network and coupled to the first firewall, the first control unit configured to receive the at least one request from the proxy server, the first control unit further configured to output at least one response corresponding to the at least one request to the proxy server, the proxy server configured to output the at least one response to the first console (*column 4, lines 1-20, column 5, line 40 to column 6, line 67*).

Claim 20: Grantges, Jr. et al discloses a system as in claim 16 above, but does not explicitly disclose wherein the proxy server includes processor- executable code, the code performing the steps of:

receiving a client request from the first console (*Fig. 2*);

writing the at least one request (*column 4, lines 1-20, column 5, line 40 to column 6, line 67*);

reading the at least one request *column 4, lines 1-20, column 5, line 40 to column 6, line 67*);

sending the at least one request to the first control unit *column 4, lines 1-20, column 5, line 40 to column 6, line 67*);

receiving the at least one response *column 4, lines 1-20, column 5, line 40 to column 6, line 67*); and

outputting the at least one response to the first console (*column 4, lines 1-20, column 5, line 40 to column 6, line 67*)).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-5, 7-11 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grantges, Jr. et al (US 6,510,464) in view of Xu et al (US 7,257,837).

Claim 2: Grantges, Jr. et al discloses a communications method as in claim 1 above, but does not explicitly disclose a second control unit inside a second firewall, the proxy server being outside the second firewall. However, Xu et al discloses a firewall penetration system for real time media communications,

which further discloses that the method further comprising configuring a second control unit inside a second firewall, the proxy server being outside the second firewall (*Fig. 1*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a second firewall. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claim 3: Grantges, Jr. et al discloses a communications method as in claim 1 above, but does not explicitly discloses a second control unit inside a second firewall, the proxy server being outside the second firewall. However, Xu et al discloses a firewall penetration system for real time media communications, which further discloses wherein configuring the first control unit includes: receiving the proxy server identification information; generating an access key in the first control unit; and sending the access key and the identification information to the proxy server. However, Xu et al discloses a firewall penetration system for real time media communications, which further discloses wherein configuring the first control unit includes: receiving the proxy server identification information; generating an access key in the first control unit; and sending the access key and the identification information to the proxy server (column 4, lines 24-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a second firewall. One would have been

motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claim 5: Grantges, Jr. et al and Xu et al disclose a communications method as in claim 3 above, and Xu et al further discloses wherein receiving the proxy server identification information includes inquiring the proxy server from the first control unit to obtain the proxy server IP address (column 4, lines 24-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a second firewall. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claim 7: Grantges, Jr. et al discloses a communications method as in claim 1 above, but does not explicitly disclose wherein establishing a session between the first control unit and the proxy server includes coupling through a second firewall, the proxy server being inside the second firewall. However, Xu et al discloses a firewall penetration system for real time media communications, which further wherein establishing a session between the first control unit and the proxy server includes coupling through a second firewall, the proxy server being inside the second firewall (column 4, lines 24-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a second firewall.

One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claim 8: Grantges, Jr. et al and Xu et al disclose a communications method as in claim 7 above, and Xu et al further discloses connecting between the proxy server and a console, the console being inside the second firewall, the connecting using an IP address facing inside the second firewall (column 4, lines 24-67; Fig. 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a second firewall. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claim 9: Grantges, Jr. et al discloses a communications system, comprising:

- i. A first enterprise network (*Fig. 1*);
- ii. A first control unit coupled to the first enterprise network (*Fig. 1* items 38);
- iii. A first firewall coupled to the first control unit (*Fig. 1, item 32*);
- iv. A public network (*Fig 1, item 26*); and
- v. A proxy server located outside the first fire wall and implemented within a De-Militarized Zone (DMZ) between the first enterprise network and the public network, coupled to the public network (*Proxy server 34 is disposed on the insecure public network side of firewall system 32, in a*

so-called Demilitarized Zone (DMZ). A DMZ is located between the insecure) (column 5, lines 58-67), the first control unit being configured with proxy server information, the proxy server being configured with first control unit information, the first control unit being further configured to send a first access key to the proxy server, the first control unit and the proxy server configured to establish a communication session based on the first access key(further messages between client computer 22 and DMZ proxy server 34 are encrypted in accordance with a session key known to both client computer 22 and DMZ proxy 34) (column 6, lines 37-67;column 8, lines 40-55)., the proxy server to aggregate and store performance data provided by the first control unit (column 6, lines 12-35).

however, does not explicitly disclose that the first control unit being configured with proxy server information, the proxy server being configured with first control unit information, the first control unit being further configured to send a first access key to the proxy server. However, Xu et al discloses a firewall penetration system for real time media communications, which further discloses that the first control unit being configured with proxy server information, the proxy server being configured with first control unit information, the first control unit being further configured to send a first access key to the proxy server (See Fig. 5a, 5b). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to configure the server and a firewall control unit with each other

information. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claims 4 and 10: Grantges, Jr. et al and Xu et al disclose a communications system and method as in claims 3 and 9 above, and Xu et al further discloses wherein receiving the proxy server information includes a proxy server host name, a proxy server IP address, and a proxy server port number (*column 2, lines 45-67*). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a proxy server host name, a proxy server IP address, and a proxy server port number. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claims 11 and 18: Grantges, Jr. et al and Xu et al disclose a communications system as in claims 9 and 16 above, and Xu et al further discloses that the system further comprising:

- i. A second firewall coupled to the public network (Fig 1);
- ii. A second control unit coupled to the second firewall (Fig. 1); and
- iii. A second enterprise network coupled to the second control unit, the second control unit being configured with proxy server information, the proxy server being configured with second control unit information, the second control unit being further configured to send a second access key

to the proxy server, the second control unit and the proxy server configured to establish a communication session based on the second access key (*column 4, line 16 to column 5, line 45; Fig. 1*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include and configure a second firewall. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

Claim 17: Grantges, Jr. et al discloses a communications system as in claim 16 above, but does not explicitly disclose a second console coupled to the proxy server, the second console configured to generate at least one other request, the proxy server configured to pool the at least one other request(Fig. 1). However, Xu et al discloses a firewall penetration system for real time media communications, which further discloses a second console coupled to the proxy server, the second console configured to generate at least one other request, the proxy server configured to pool the at least one other request(Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include a second console. One would have been motivated to do so in order to establish and maintain real time media communication channels through firewall as taught by Xu et al (column 1, lines 5-10).

8. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grantges, Jr. et al (US 6,510,464) in view of Beurket et al (US 6,360,273).

Claim 12: Grantges, Jr. et al discloses a communication system, comprising:

- i. A first enterprise network(Fig. 1);
- ii. A first control unit coupled to the first enterprise network (Fig. 1, item 38);
- iii. A first firewall coupled to the first control unit(Fig. 1, item 32);
- iv. A public network (Fig. 1, item 26); and
- v. A proxy server that includes at least one of a client request handler, a shared request object pool, or a server request handler, the proxy server being implemented within a De- Militarized Zone (DMZ) between the first enterprise network and the public network. *(Proxy server 34 is disposed on the insecure public network side of firewall system 32, in a so-called Demilitarized Zone (DMZ). A DMZ is located between the insecure)* (column 5, lines 58-67).

However, does not explicitly discloses that a proxy server that includes at least one of a client request handler, a shared request. However, Beurket et al discloses system for collaborative transformation, which further discloses that proxy server that includes at least one of a client request handler, a shared request object pool, or a server request handler (Fig. 2, item 230). Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include at least one of a client request handler, a shared request object pool, or a server request handler in the proxy server. One would have been motivated to do so in order to enable authentication between entities in communication.

Claim 13: Grantges, Jr. et al and Beurket et al disclose a communication system as in claim 12 above, and Grantges, Jr. et al further discloses wherein the proxy server is configured to receive first control unit identification information, store the first control unit identification information in the proxy server, add the first control unit as a first remote device, and exchange a validation message between the first control unit and the proxy server (column 6, lines 12-35).

9. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grantges, Jr. et al (US 6,510,464) in view of Beurket et al (US 6,360,273) and Xu et al (US 7,257,837)..

Claim 14: Grantges, Jr. et al and Beurket et al disclose a communication system as in claim 13 above, while neither of them explicitly discloses a that the system further discloses a second firewall, a second control unit and a second enterprise network, However, Xu et al discloses a firewall penetration system for real time media communications, which further discloses that the system further comprising:

- i. A second firewall coupled to the public network (Fig. 1)

- ii. A second control unit coupled to the second firewall (Fig. 1); and
- iii. A second enterprise network coupled to the second control unit, the second control unit configured to receive proxy server identification information, generate a access key in the first control unit, and send the access key and the identification information to the proxy server(column 4, line 16 to column 5, line 45; Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include second firewall, a second control unit and a second enterprise network. One would have been motivated to do so in order to enable authentication between entities in communication.

Claim 15: Grantges, Jr. et al, Beurket et al and Xu et al disclose a communication system as in claim 14 above, and Xu et al further discloses wherein the proxy server is configured to receive second control unit identification information, store the second control unit identification information in the proxy server, add the second control unit as a second remote device, and exchange a validation message between the second control unit and the proxy server (column 10 line 11column 11, line 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include second firewall, a second control unit and a second enterprise network. One would have been

motivated to do so in order to enable authentication between entities in communication.

10. Claims 19-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grantges, Jr. et al (US 6,510,464) in view of Devine et al (US 6,968,571).

Claims 19 and 22: Grantges, Jr. et al discloses a system and method as in claims 16 and 21 above, but does not explicitly disclose wherein the proxy server includes: a client request, a shared request object pool, a server request handler, and a shared request object pool. However Devine et al discloses a secure customer interface for web based data management, which further discloses

- i. A client request handler for receiving a client request from the first console (*column 18, lines 59-67*);
- ii. A shared request object pool coupled to the client request handler, the shared request object pool configured to store the at least one request (*column 21, lines 1-15*); and
- iii. A server request handler coupled to the shared request object pool (*column 21, lines 13-35*), the server request handler configured to read the at least one request from the shared request object pool, the server request handler configured to send the at least one request to the first control unit, the server request handler configured to receive the at least one response, the server request handler configured to output the at

least one response to the first console(*column 18, line 59 to column 19 , line 20*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Grantges, Jr. et al such as to include in the proxy server includes: a client request, a shared request object pool, a server request handler, and a shared request object pool. One would have been motivated to do so in order to provide a security methodology for connecting users to an enterprise network or extranet over the public Internet as taught by Devine et al (column 1, lines 20-25).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fatoumata Traore whose telephone number is (571) 270-1685. The examiner can normally be reached Monday through Thursday from 7:00 a.m. to 4:00 p.m. and every other Friday from 7:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nassar G. Moazzami, can be reached on (571) 272 4195. The fax phone number for Formal or Official faxes to Technology Center 2100 is (571) 273-8300. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2685.

Art Unit: 2136

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-2100.

FT

Friday, August 1, 2008

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2136